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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/522,407	03/09/2000	Toshihiro Shima	Q58164	4033

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EXAMINER

REITZ, KARL

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 01/09/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/522,407

Applicant(s)

SHIMA, TOSHIHIRO

Examiner

Karl R. Reitz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
2. The disclosure is objected to because of the following informalities: the word 'relayed' on page 3 line 12 should be 'delayed'.
3. The phrase 'another any' on page 22 line 5 is unclear. Is the priority of the writing task changed to be higher than the priority of another task, or of any task, or of any other task?
4. The phrase 'concretely approximately' on page 22 lines 14-15 is unclear. The word 'concretely' implies definitiveness whereas the word 'approximately' implies some level of ambiguity, thus a parameter cannot be concrete and approximate at the same time.
5. The phrase 'approximately always' on page 29 line 25 – page 30 line 1 is unclear. The word the word 'approximately' implies some level of ambiguity, whereas the word 'always' implies definitiveness thus a parameter cannot be approximately always set in one way at the same time.
6. Appropriate correction is required.
7. The abstract of the disclosure is objected to because it ends with the phrase "for seven lines." The meaning of this phrase, which is not mentioned in the disclosure, is unclear and requires further explanation. Correction is required. See MPEP § 608.01(b).

Drawings

8. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference signs not mentioned in the description: 21 (in figure 3) and 23 (in figure 13). A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference signs in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

9. Claim 11 recites the limitation "said CPU" in line 15. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Shima (EP 820 032 A2).

12. In accordance with claim 1, Shima discloses a printer 1 (figure 1) with an auxiliary storage 2a (col. 4 lines 13-17).

13. Shima further discloses that the printer has a printing task (print request preparation section 4) for controlling the print engine in accordance with a request for printing (col. 5 lines 14-19).

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14. Shima further discloses that the printer has an image generation task (intermediate code generation section 3) for generating requests for printing (col. 4 lines 18-19 and col. 5 lines 14-18).

15. Shima further discloses that the printer has a task for writing print data to the auxiliary storage, performed by the print data reception section 2 (col. 5 lines 34-38).

16. Shima further discloses that the printer has a task for reading print data from the auxiliary storage; in Shima's system, print job data is read from the auxiliary storage and converted into intermediate code by the intermediate code generation section 3 (col. 5 lines 38-42).

17. Shima further discloses that each task is selected and executed according to the specific priority of each job; in Shima's system a job is assigned a priority level, when multiple jobs are received, the tasks are executed with priorities based on the job priorities (col. 5 line 55 – col. 6 line 20).

18. Shima further discloses that the relative priorities of the writing task and the image generation task are varied when a predetermined event occurs; in Shima's system, intermediate code generation for the highest priority job is executed with the highest priority, then data for the remaining jobs is written to the auxiliary storage with the next highest priority and intermediate code generation for those jobs is executed with the least priority (col. 6 lines 13-20). In Shima's system, task priority is based upon size or transfer speed of a job (col. 5 line 57 – col. 6 line 2).

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shima in view of Shima et al (EP 0 782 067 A2).

21. In accordance with claim 2, Shima further discloses that job priority levels can be altered; in Shima's system multiple jobs sent to the printer are assigned priority based on how quickly they can be made ready for printing, thus printing is started as quickly as possible while the remaining jobs are processed so that printing can continue as soon as the job that is currently printing finishes, this is done to maximize the efficiency of the print engine (col. 5 line 53 – col. 6 line 24). However, Shima does not disclose expressly that individual tasks are prioritized.

22. Shima et al. further discloses tasks, including a reception task and an image generation task, and assigning priorities to each task (col. 14 lines 12-28). These tasks are executed based on priority in order to speed up printing time (col. 14 lines 26-28 and col. 17 line 59). Thus, Shima et al. also teaches altering the priorities of the tasks involved in printing in order to speed up processing, from which it follows that the printing task is executed with a higher priority than the reading and writing tasks if it results in a decrease in processing time.

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23. Shima and Shima et al. are combinable because they are from the same field of endeavor, namely image forming apparatuses that can alter the priority of printing.

24. Therefore, at the time of invention it would have been obvious to a person of ordinary skill in the art to use a prioritization scheme like Shima et al.'s to execute tasks in orders to decrease processing time.

25. The motivation for doing so would have been to allocate the printers resources away from areas where they are not needed to areas that require the use of resources, allowing the processing time to be decreased (Shima et al.: col. 17 line 59).

26. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shima in view of Shima et al. in further view of Utsunomiya (5,822,500).

27. In accordance with claim 3, Shima and Shima et al. do not disclose expressly that the predetermined event of claim 1 be the elapse of a specified length of time.

28. Utsunomiya discloses altering the order of tasks performed by a printer based on the elapse of a predetermined time period; specifically in Utsunomiya's system, a timer is started while image data is being generated for one print job, when the timer has elapsed to a set limit, the development of this job's image data is temporarily stopped and the development of the image data for the next job is started (col. 6 lines 4-23).

29. Shima, Shima et al. and Utsunomiya are combinable because they are from the same field of endeavor, namely image forming apparatuses that can alter the priority of printing.

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30. Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to prioritize tasks, as taught in Shima et al., based on the elapse of a certain time, as taught in Utsunomiya.

31. The motivation for doing so would have been to allow small documents to print without having to wait for the completion of a much larger document that takes longer to process (Utsunomiya: col. 6 lines 12-19).

Claim Rejections - 35 USC § 102

32. Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Shima.

33. In accordance with claim 4, Shima discloses that the priorities of each task may be varied based on the occurrence of predetermined events; in one embodiment of Shima's system task priority is based upon size or transfer speed of a job (col. 5 line 57 – col. 6 line 2).

Claim Rejections - 35 USC § 103

34. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shima in view of Shima et al, in further view of Utsunomiya.

35. In accordance with claim 5, Shima and Shima et al. do not disclose expressly that the predetermined event be a judgment that the quantity of requests for printing exceeds a specific number.

36. Utsunomiya discloses altering the order of tasks performed by a printer based on the number of print requests; specifically in Utsunomiya's system, a timer is started while image data is being generated for one print job, when the timer has elapsed to a set limit, the development of the first image data is temporarily stopped and the

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development of the image data for the next job is started, however if only one job has been submitted, the document is printed without interruption, thus the process of varying task order is only undertaken if the number of requests submitted is greater than one (col. 6 lines 4-23).

37. Shima, Shima et al. and Utsunomiya are combinable because they are from the same field of endeavor, namely image forming apparatuses that can alter the priority of printing.

38. Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to prioritize tasks, as taught in Shima et al., based on the number of submitted requests, as taught in Utsunomiya.

39. The motivation for doing so would have been to allow small documents to print without having to wait for the completion of a much larger document that takes longer to process (Utsunomiya: col. 6 lines 12-19).

40. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shima in view of Shima et al.

41. In accordance with claim 6, Shima does not disclose expressly that the priority level of writing to the auxiliary storage is set below the priority level of reading from the auxiliary storage.

42. Shima et al. discloses tasks, including a reception task and an image generation task, and assigning priorities to each task; a reception task must include writing to auxiliary storage since received data is stored until it can be processed and an image generation task must include reading data from the auxiliary storage as image

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processing begins after data is received and stored (col. 14 lines 12-28). These tasks are executed based on priority in order to speed up printing time (col. 14 lines 26-28 and col. 17 line 59). Thus, Shima et al. teaches altering the priorities of the tasks involved in printing in order to speed up processing, from which it follows that the reading task is executed with a higher priority than the write task if it resulted in a decrease in processing time.

43. Shima and Shima et al. are combinable because they are from the same field of endeavor, namely image forming apparatuses that can alter the priority of printing.

44. Therefore, at the time of invention it would have been obvious to a person of ordinary skill in the art use a prioritization scheme like Shima et al.'s to execute tasks in orders depending on what was occurring during print processing.

45. The motivation for doing so would have been to allocate resources away from areas where they are no longer needed to areas that still require the use of resources to speed up processing time (col. 17 line 59).

46. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shima in view of Shima et al.

47. In accordance with claim 7, Shima discloses a printer 1 (figure 1) with an auxiliary storage 2a for storing print data (col. 4 lines 13-17).

48. Shima further discloses that the printer has a printing task (print request preparation section 4) for controlling the print engine in accordance with a request for printing (col. 5 lines 14-19).

49. Shima further discloses a print engine for executing printing (col. 5 line 19).

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50. Shima further discloses that the printer has a means for writing print data to the auxiliary storage, performed by the print data reception section 2 (col. 5 lines 34-38).

51. Shima further discloses that the printer has a means for reading print data from the auxiliary storage; in Shima's system, print job data is read from the auxiliary storage and converted into intermediate code by the intermediate code generation section 3 (col. 5 lines 38-42).

52. Shima further discloses that the printer has an image generation means (intermediate code generation section 3) for generating requests for printing (col. 4 lines 18-19 and col. 5 lines 14-18).

53. Shima further discloses that the printer has a printing execution means (print mechanism 6) for controlling the print engine (col. 5 lines 19-23).

54. Shima further discloses that each task is executed according to the specific priority of each task; in Shima's system a job is assigned a priority level, if one job has a higher priority than another, the steps described above are performed on the higher priority job first, even if the other job was received first and is already being processed (col. 5 line 53 – col. 6 line 20). Shima further discloses that the priorities of each task may be varied based on the occurrence of predetermined events; in one embodiment of Shima's system task priority is based upon size or transfer speed of a job (col. 5 line 57 – col. 6 line 2). However, Shima does not disclose expressly that the detection of a predetermined event cause the writing means to be assigned a higher priority than the image generation means.

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55. Shima et al. discloses tasks, including a reception task, which must include writing to storage since received data is stored until it can be processed and an image generation task, and assigning priorities to each task (col. 14 lines 12-28). These tasks are executed based on priority in order to speed up printing time (col. 14 lines 26-28 and col. 17 line 59). Thus, Shima et al. teaches altering the priorities of the tasks involved in printing in order to speed up processing, from which it follows that the writing task is executed with a higher priority than the image generation task if it resulted in a decrease in processing time.

56. Shima and Shima et al. are combinable because they are from the same field of endeavor, namely image forming apparatuses that can alter the priority of printing.

57. Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art use a prioritization scheme like Shima et al.'s to execute tasks in orders depending on what was occurring during print processing.

58. The motivation for doing so would have been to allocate resources away from areas where they are no longer needed to areas that still require the use of resources to speed up processing time (col. 17 line 59).

Claim Rejections - 35 USC § 102

59. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Shima.

60. In accordance with claim 8, Shima further discloses that data stored in auxiliary storage include print data sent from an external device (col. 4 lines 44-49).

61. Claim 9 is rejected under 35 U.S.C. 103(a) as being anticipated by Shima.

62. In accordance with claim 9, Shima further disclose that data stored in auxiliary storage include at least part of request for printing data (col. 5 lines 9-38).

Claim Rejections - 35 USC § 103

63. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shima in view of Shima et al.

64. In accordance with claim 10, Shima discloses that the printer 1 has a writing process for writing print data to the auxiliary storage, performed by the print data reception section 2 (col. 5 lines 34-38).

65. Shima further discloses that the printer has a reading process for reading print data from the auxiliary storage; in Shima's system, print job data is read from the auxiliary storage and converted into intermediate code by the intermediate code generation section 3 (col. 5 lines 38-42).

66. Shima further discloses that the printer has a generation process (performed by the intermediate code generation section 3) for generating requests for printing (col. 4 lines 18-19 and col. 5 lines 14-18).

67. Shima further discloses that the printer has a printing process (performed by the print mechanism 6) for printing based on the request for printing (col. 5 lines 19-23).

68. Shima does not disclose expressly that during image generation, the printer be allowed to continue writing data to the auxiliary storage.

69. Shima et al. discloses that the process of receiving print data, which includes writing the data to auxiliary storage, be controlled so that it can be executed even while the image generation process is being executed (col. 13 lines 35-37).

70. Shima and Shima et al. are combinable because they are from the same field of endeavor, namely image forming apparatuses that can alter the priority of printing.

71. Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to allow the printer to continue to receive and store data during image generation as disclosed in Shima et al.

72. The motivation for doing so would have been to allow data to be received from host devices during image generation in order to minimize the time a host device must wait to transfer data to the printer.

73. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shima in view of Shima et al.

74. In accordance with claim 11, Shima discloses that the printer 1 has a writing process for writing print data to the auxiliary storage, performed by the print data reception section 2 (col. 5 lines 34-38).

75. Shima further discloses that the printer has a reading process for reading print data from the auxiliary storage; in Shima's system, print job data is read from the auxiliary storage and converted into intermediate code by the intermediate code generation section 3 (col. 5 lines 38-42).

76. Shima further discloses that the printer has a generation process (performed by the intermediate code generation section 3) for generating requests for printing (col. 4 lines 18-19 and col. 5 lines 14-18).

77. Shima further discloses that the printer has a printing process (performed by the print mechanism 6) for printing based on the request for printing (col. 5 lines 19-23).

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78. Shima further discloses that the priorities of each task may be varied based on the occurrence of predetermined events; in one embodiment of Shima's system task priority is based upon size or transfer speed of a job (col. 5 line 57 – col. 6 line 2).

79. Shima further discloses that the relative priority of the writing task is varied; in Shima's system, intermediate code generation for the highest priority job is executed with the highest priority, then data for the remaining jobs is written to the auxiliary storage with the next highest priority, thus as soon as one job is undergoing image generation, the writing task is assigned the highest priority (col. 6 lines 13-20).

However, Shima does not disclose expressly that individual tasks are prioritized.

80. Shima et al. further discloses that the process of receiving print data, which includes writing the data to auxiliary storage, be controlled so that it can be executed even while the image generation process is being executed (col. 13 lines 35-37). Shima et al. further discloses tasks, which are executed based on priority in order to speed up printing time (col. 14 lines 26-28 and col. 17 line 59). Thus, Shima et al. teaches altering the priorities of the tasks involved in printing in order to speed up processing, from which it follows that the writing task is executed with a higher priority if it results in a decrease in processing time.

81. Shima and Shima et al. are combinable because they are from the same field of endeavor, namely image forming apparatuses that can alter the priority of printing.

82. Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to allow the printer to alter the priorities of the tasks, as described by Shima and Shima et. al, to execute the writing task with a higher priority than other

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tasks, once a quantity of requests for printing data has been generated, as disclosed by Shima.

83. The motivation for doing so would have been to allow data to continue to be received from host devices during image generation in order to minimize the time a host device must wait to transfer data to the printer.

84. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shima in view of Shima et al.

85. In accordance with claim 12, Shima discloses operating a printer 1 (figure 1) with an auxiliary storage 2a (col. 4 lines 13-17) and a print engine (col. 5 line 19). Shima further discloses that printer is operated by executing tasks is according to the specific priority of each task; in Shima's system a job is assigned a priority level, if one job has a higher priority than another, the tasks are performed on the higher priority job first, even if the other job was received first and is already being processed (col. 5 line 53 – col. 6 line 20).

86. Shima discloses that the printer 1 has a writing task for writing print data to the auxiliary storage, performed by the print data reception section 2 (col. 5 lines 34-38).

87. Shima further discloses that the printer has a reading task for reading print data from the auxiliary storage; in Shima's system, print job data is read from the auxiliary storage and converted into intermediate code by the intermediate code generation section 3 (col. 5 lines 38-42).

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88. Shima further discloses that the printer has an image generation task (performed by the intermediate code generation section 3) for generating requests for printing (col. 4 lines 18-19 and col. 5 lines 14-18).

89. Shima further discloses that the printer has a printing task (print request preparation section 4) for controlling the print engine in accordance with a request for printing (col. 5 lines 14-19).

90. Shima further discloses that priority level of the printing task be high; in Shima's system multiple jobs sent to the printer are assigned priority based on how quickly they can be made ready for printing, thus printing is started as quickly as possible while the remaining jobs are processed so that printing can continue as soon as the job that is currently printing finishes, this is done to maximize the efficiency of the print engine (col. 4 line 44 – col. 5 line 24).

91. Shima does not disclose expressly a record medium for recording a program for operating the printer.

92. Shima et al. discloses a storage medium with a program for a print system (claim 17).

93. Shima and Shima et al. are combinable because they are from the same field of endeavor, namely image forming apparatuses that can alter the priority of printing.

94. Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to use a program to operate the printer of Shima's system.

95. The motivation for doing so would have been to implement a method of controlling the printing system.

96. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shima in view of Shima et al.

97. In accordance with claim 13, Shima discloses operating a printer 1 (figure 1) with an auxiliary storage 2a (col. 4 lines 13-17) and a print engine (col. 5 line 19). Shima further discloses that printer is operated by executing tasks according to the specific priority of each task; in Shima's system a job is assigned a priority level, if one job has a higher priority than another, the tasks are performed on the higher priority job first, even if the other job was received first and is already being processed (col. 5 line 53 – col. 6 line 20).

98. Shima discloses that the printer 1 has a writing task for writing print data to the auxiliary storage, performed by the print data reception section 2 (col. 5 lines 34-38).

99. Shima further discloses that the printer has a reading task for reading print data from the auxiliary storage; in Shima's system, print job data is read from the auxiliary storage and converted into intermediate code by the intermediate code generation section 3 (col. 5 lines 38-42).

100. Shima further discloses that the printer has an image generation task (performed by the intermediate code generation section 3) for generating requests for printing (col. 4 lines 18-19 and col. 5 lines 14-18).

101. Shima further discloses that the printer has a printing task (print request preparation section 4) for controlling the print engine in accordance with a request for printing (col. 5 lines 14-19).

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102. Shima et al. discloses tasks, including a reception task and an image generation task, and assigning priorities to each task; a reception task must include writing to auxiliary storage since received data is stored until it can be processed and an image generation task must include reading data from the auxiliary storage as image processing begins after data is received and stored (col. 14 lines 12-28). These tasks are executed based on priority in order to speed up printing time (col. 14 lines 26-28 and col. 17 line 59). Thus, Shima et al. teaches altering the priorities of the tasks involved in printing in order to speed up processing, from which it follows that the priorities of the writing task and the reading task are controlled according to conditions, so as to result in decreased processing time.

103. Shima et al. further discloses a storage medium with a program for a print system (claim 17).

104. Shima and Shima et al. are combinable because they are from the same field of endeavor, namely image forming apparatuses that can alter the priority of printing.

105. Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to alter the priorities of the tasks involved in the printing, as taught by Shima et al., and to use a program to operate the printer of Shima's system.

106. The motivation for doing so would have been to decrease the processing time of the printer and to implement a method of controlling the printing system.

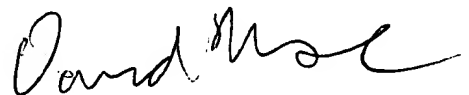
Contact Information

107. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl R. Reitz whose telephone number is (703) 305-8696. The examiner can normally be reached on Monday-Friday 8:00-4:30.

108. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (703) 305-7452. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

109. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9700.

KRR



**DAVID MOORE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**